

**A WRITE ELEMENT HAVING A NARROW WRITER POLE
DEFINED BY ION IMPLANTATION**

ABSTRACT OF THE DISCLOSURE

- 5 A write element includes a return pole that is separated from a writer pole by a writer gap layer. The writer pole has a width and a magnetically active region adjoining a first magnetically dead side wall. The magnetically active region defines a track width of the write element, which is less than a width of the writer pole.

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